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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,197	03/29/2004	Michael Thomas Dudek	P00849-US	1400
3017	7590	11/22/2006	EXAMINER	
BARLOW, JOSEPHS & HOLMES, LTD.			LEE, PATRICK J	
101 DYER STREET			ART UNIT	PAPER NUMBER
5TH FLOOR				2878
PROVIDENCE, RI 02903				

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/812,197	DUDEK ET AL.
	Examiner Patrick J. Lee	Art Unit 2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 March 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-33 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 16-33 is/are allowed.

6)  Claim(s) 1-3, 6-10, 12 and 13 is/are rejected.

7)  Claim(s) 4, 5, 11, 14 and 15 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 29 March 2004 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All   b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_ .  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_ . 5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_ .

## DETAILED ACTION

### ***Claim Objections***

1. Claim 12 is objected to because of the following informalities: "claim1" should read "claim 1".

Appropriate correction is required.

### ***Specification***

2. The disclosure is objected to because of the following informalities:

In line 1 of paragraph [02], "re" should read "are".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless—

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 6, 9, & 13 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,774,448 B1 to Lindemann et al.

With respect to claim 1, Lindemann et al disclose an optoelectronic device comprising: array (801) of photodetectors (800); array of input pads for a transimpedance amplifier array (see figure 24) connected by wires (820); and ground

pad disposed between adjacent set of input pads connected by wires (810) (see figure 24).

With respect to claim 2, Lindemann et al disclose the use of signal traces (820) as conductive wires for connecting photodetector (800) with the corresponding input pad of the transimpedance amplifier array (see figure 24).

With respect to claim 3, Lindemann et al illustrate the use of ground pads located between adjacent set of input pads of transimpedance amplifier array (see figure 24).

With respect to claim 6, Lindemann et al disclose the use of a linear array of photodetectors where the input pad is coupled to bond pad of the corresponding photodetector by wires (820) as substantially linear conductive leads.

With respect to claim 9, Lindemann et al disclose the use of ground structure connected to ground and to each of ground pads (see column 12, lines 50-53).

With respect to claim 13, Lindemann et al disclose an optoelectronic device comprising: array (801) of photodetectors (800); array of input pads for a transimpedance amplifier array (see figure 24) connected by wires (820) as a plurality of data channels with each data channel having a conductive lead coupling an input pad of a transimpedance amplifier to a corresponding photodetector; and ground pad disposed between adjacent set of input pads connected by wires (810) (see figure 24).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 7-8, 10, & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,774,448 B1 to Lindemann et al.

Lindemann et al disclose the device as described in the discussion of claims 1-3, 6, 9, & 13.

With respect to claim 7, Lindemann et al does not explicitly disclose the linear array of input pads and photodetectors having substantially the same pitch, but such would have been obvious to one of ordinary skill in the art because such would allow for ease of manufacture of the device and would prevent the crossing of wires that would lead to adverse signal generation.

With respect to claims 8, the use of a ground strip connected to a ground is not explicitly disclosed, but such would have been obvious to one of ordinary skill in the art because such would allow for appropriate control of the signals within the device.

With respect to claim 10, the modified Lindemann et al disclose the ground lines (810) as a wire bonding the ground pad to the ground structure.

With respect to claim 12, the modified Lindemann et al does not explicitly describe the device as a receiver optical subassembly, but the device taught by the modified Lindemann et al would have been functionally equivalent because both would be used to receive light.

***Allowable Subject Matter***

8. Claims 4-5, 11, & 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. Claims 16-33 are allowable over the prior art.
10. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 4, 11, 14-16, & 32-33, the teachings of Lindemann et al does not disclose nor suggest the locating of different elements of the device on different levels of a multi-layer ceramic substrate. As a result, claims 4, 11, & 14 and dependent claims 5 & 15 are objected and claims 16 & 32-33 and dependent claims 17-31 are allowable over the prior art.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Lee whose telephone number is (571) 272-

2440. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



PJL  
November 20, 2006

Patrick J. Lee  
Examiner  
Art Unit 2878